2/15/2005 2:36 PM FROM: 4082579904 Heimlich Law TO: 1 703 8729306 PAGE: 008 OF 020 2/2/2005 7:35 LM FROM: 4082579904 Heimlich Law TO: 1 703 872 9306 TAGE: 005 OF 017

#### **REMARKS/ARGUMENTS**

Applicant respectfully requests reconsideration of this application in view of the following remarks.

# Claim 1, 17, and 22 question under 35 U.S.C. § 101

The Office raises a question as to whether claims 1, 17, and 22 are directed merely to an abstract idea that is not tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. § 101.

Applicant in claim 1, claim 17, and claim 22 recites respectively, among other things:

- 1. A method for traversing a firewall, comprising:
- 17. A firewall traversal system comprising:
- 22. A method for traversing a firewall, comprising:

[Emphases added.]

Applicant submits that a firewall is understood by those in the art to refer to a mechanism that is implemented in hardware and/or software relating to a communications device that is generally used for restricting/controlling communications. Applicant submits that the method of claim 1, the system of claim 17, and the method of claim 22 are not abstract ideas and are directed to a firewall and the technological art, environment, or machine associated with such.

Response to OA of 08 10 2004

Page 2 of 14

2/15/2005 2:36 PM FROM: 4082579904 Heimlich Law TO: 1 703 8729306 PAGE: 009 OF 020 2/2/2005 7:35 IM FROM: 4082579904 Heimlich Law TO: 1 703 872 9306 IAUE: 006 OF 017

## Claim 1 Rejection under 35 U.S.C. § 102(b) - Vellanki

Applicant's claim 1 recites:

1. A method for traversing a firewall, comprising:

initiating a first connection;

evaluating the first connection for a response from a remote system indicating a successful first connection;

initiating a second connection if a successful first connection is not established:

evaluating the second connection for a response from a remote system indicating a successful second connection:

initiating a third connection if a successful second connection is not established; and evaluating the third connection for a response from a remote system indicating a successful third connection.

[Emphases added.]

The Office states on page 3 and 4:

As per claims 1, 14, and 22, Vellanki teaches <u>initiating a first connection</u>; <u>evaluating the first connection</u> for a response from a remote system indicating a successful first connection; <u>initiating a second connection</u> for a response from a remote system indicating a successful second connection for a response from a remote system indicating a successful second connection; <u>initiating a third connection if a successful second connection</u> for a response from a remote system indicating a successful third connection for a response from a remote system indicating a successful third connection (page 20, lines 21-29). [Emphases added.]

At the cited section of Vellanki (page 20, lines 21-29) is stated:

Response to OA of 08:10:2004

Page 3 of 14

2/15/2005 2:36 PM FROM: 4082579904 Heimlich Law TO: 1 703 8729306 PAGE: 010 OF 020 2/2/2005 7:35 LM FROM: 4082579994 Heimlich Law TO: 1 703 872 9306 LAUE: 007 OF 017

In step 704, the client begins the autodetect sequence by starting in parallel the control thread 794, along with five protocol threads 790, 792, 796, 798, and 788. As the term is used herein, parallel refers to both the situation wherein the multiple protocol threads are sent parallely starting at substantially the same time (having substantially similar starting time), and the situation wherein the multiple protocol threads simultaneously execute (executing at the same time), irrespective when each protocol thread is initiated. In the latter case, the multiple threads may have, for example, staggered start time and the initiation of one thread may not depend on the termination of another thread.

[Emphases added.]

Applicant's claim limitation has a second or third connection initiated <u>only</u> if the prior one fails. Thus there is a fundamental difference between what Applicant has claimed in claim 1 and what Vellanki discloses. **Applicant's method is sequential whereas**Vellanki's method is parallel.

Since Vellanki does not disclose this limitation of Applicant's claim 1, Vellanki does not anticipate Applicant's claim 1. Applicant therefore respectfully requests allowance of claim 1 and all claims dependent on claim 1.

2/15/2005 2:36 PM FROM: 4082579904 Heimlich Law TO: 1 703 8729306 PAGE: 011 OF 020 2/2/2005 7:35 IM FROM: 4082579904 Heimlich Law TO: 1 703 872 9306 IAUE: 008 DF 017

# Claim 14 and Claim 22 Rejection under 35 U.S.C. § 102(b) - Vellanki

Applicant's claim 14 is a Beauregard style version of claim 1. Thus, for the same reasons as in the Claim 1 discussion above, Vellanki does not anticipate Applicant's claim 14. Applicant requests allowance of claim 14 and all claims dependent on claim 14.

Applicant's claim 22 is a means plus function style version of claim 1. Thus, for the same reasons as the Claim 1 discussion above, Vellanki does not anticipate Applicant's claim 22. Applicant requests allowance of claim 22 and all claims dependent on claim 22.

# Claim 6 Rejection under 35 U.S.C. § 103(a) - Vellanki in view of Harvey

Applicant's claim 6 recites:

6. The method according to claim 5, wherein determining a likely proxy address and port further comprises packet sniffing.

Applicant's claim 6 is dependent on claim 5, which is in turn dependent on claim 2, which is in turn dependent on claim 1. The issue of a 102(a) Vellanki rejection for claims 1, 2, and 5 are addressed above and incorporated herein.

#### The Office on page 7 states:

As per claims 6 and 24, Vellanki teaches determining proxy addresses and ports but is silent in explicitly using a packet sniffer to do so. Harvey teaches that sniffing packets useful in determining which ports of addresses are currently accepting network data (col. 1, lines 58-60). It

Response to OA of 08 10 2004

Page 5 of 14

2/15/2005 2:36 PM FROM: 4082579904 Heimlich Law TO: 1 703 8729306 PAGE: 012 OF 020 2/2/2005 7:35 IM FROM: 4082579904 Heimlich Law TO: 1 703 872 9306 TAGE: 009 OF 017

would be advantageous to use a sniffer to determine which ports are open because it can try a wide variety of ports quickly.

In view of this, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teaching of Harvey within the system of Vellanki because it would more quicker determine which ports to try to connect to on the server. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

### Harvey at the cited location (col. 1, lines 58-60) states:

The present invention can locate an address and port number of a data packet through the use of the network sniffer, determine if it has already been processed, evaluate the data packet associated with the address and port number, and determine if it meets predetermined criteria. If it does meet the predetermined criteria, then the data is saved in a database.

### Harvey is concerned with (see col 1, lines 40-45):

The present invention is a system and method for locating requested data streams by accessing data monitored by a network sniffer for a particular node and evaluating data which is within the privilege level of a particular

usor.

Response to OA of 08 10 2004

Page 6 of 14

2/15/2005 2:36 PM FROM: 4082579904 Heimlich Law TO: 1 703 8729306 PAGE: 013 OF 020 2/2/2005 7:35 PM FROM: 4082579904 Heimlich Law TC: 1 703 872 9306 TAGE: 016 OF 017

### [Emphasis added.]

Harvey is directed to monitoring only within a privilege level of a particular user.

Applicant's claim 6 has no such limitation. Additionally, Vellanki does not disclose a limitation of Applicant's claim 6 (as discussed above in claim 1) and the addition of Harvey does not cure this limitation. Thus neither Vellanki nor Harvey singly or in combination describe what Applicant has claimed in claim 6.

Additionally, combining Vellanki which is concerned with "detecting a most advantageous protocol for communication by a client computer" (Abstract) and Harvey which is concerned with "locating available information in a network environment by a user in a mode" (Abstract) lacks a motivation to combine. Detecting a protocol is different than locating available information for a particular user privilege level. Combining a restricted user privilege level (Harvey) with trying to determine the most advantageous protocol (Vellanki) would limit the functionality of Vellanki.

Thus neither Vellanki nor Harvey singly or in combination describe what Applicant has claimed in claim 6. Applicant therefore requests allowance of claim 6 and claims dependent on claim 6.

2/15/2005 2:36 PM FROM: 4082579904 Heimlich Law TO: 1 703 8729306 PAGE: 014 OF 020 2/2/2005 7:35 IM FROM: 4082579904 Heimlich Law TO: 1 703 872 9306 TAGE: 011 DF 017

### Claim 16 Rejection under 35 U.S.C. § 103(a) - Vellanki in view of Harvey

Applicant's Claim 16 recites:

16. The machine-readable medium according to claim 15, further configuring said processor to perform the following:

examine network traffic; and

build a database of parameters likely to allow establishment of a HTTP connection via a proxy connection.

Applicant's claim 16 is dependent on claim 15, which is in turn dependent on claim 14. The issue of a 102(a) Vellanki rejection for claim 14, and claim15 are addressed above and incorporated herein. Additionally, Harvey as discussed above locates available information for a particular user privilege level. The combination of Vellanki and Harvey would <u>limit</u> the database to a particular user privilege level.

Additionally Vellanki at the cited text (col. 1, lines 58-60) states "Once the most advantageous protocol is selected, parameters pertaining to the selected protocol are saved to enable the client computer, in future sessions, to employ the same selected protocol for communication." (Emphases added.)

Vellanki stores information <u>after</u> the most advantageous protocol is selected.

Applicant's claim 16 builds a database likely to allow establishment of a HTTP connection. Storing something after is not the same as storing something before.

Applicant's claim 16 is not obvious in view of Vellanki or in view of the Vellanki-Harvey combination. Applicant requests allowance of claim 16.

Response to OA of 08:10:2004

Page 8 of 14

2/15/2005 2:36 PM FROM: 4082579904 Heimlich Law TO: 1 703 8729306 PAGE: 015 OF 020 2/2/2005 7:35 IM FROM: 4082579904 Heimlich Law TO: 1 703 872 9306 TAGE: 012 DF 017

## Claim 24 Rejection under 35 U.S.C. § 103(a) - Vellanki in view of Harvey

For arguments similar to those advanced in claim 16, Applicant submits that Applicant's claim 24 is not obvious in view of Vellanki or in view of the Vellanki-Harvey combination. Applicant requests allowance of claim 24.

# Claim 12 Rejection under 35 U.S.C. § 103(a) - Vellanki in view of Cunningham

Applicant's claim 12 recites:

12. The method of claim 2 further comprising using Ethernet with the Transmission Control Protocol (TCP).

Applicant's claim 12 is dependent on claim 2, which is in turn dependent on claim

1. The issue of a 102(a) Vellanki rejection for claim 1, and claim 2 are addressed above and incorporated herein.

The Office states on pages 8-9:

As per claim 12, Vellanki does not explicitly teach using Ethernet with the TCP. Vellanki does teach computers using TCP connected to the Internet. Curningham teaches that there are standardizations in the packetizing for the Internet (col. 7, lines 1-14). One such standard is an Ethernet packet comprising a TCP packet. In view of this it would have been obvious to one of ordinary skill in the art at the time of the invention to employ

Response to OA of 08:10:2004

Page 9 of 14

2/15/2005 2:36 PM FROM: 4082579904 Heimlich Law TO: 1 703 8729306 PAGE: 016 OF 020 2/2/2005 7:35 LM FROM: 4082579904 Heimlich Law TO: 1 703 872 9306 TAGE: 013 DF 017

the teachings of Cunningham within the system of Vellarki because TCF packets are sent in Ethernet packets through the Internet.

Applicant does not dispute that there are standards for packetizing, however, the addition of Cunningham to Vellanki does not suggest, disclose, or make obvious what Applicant has claimed in claim 12. The Vellanki-Cunningham combination does not disclose the serial limitation of Applicant's claim 1 (as discussed above in claim 1) and the addition of Cunningham's definition that packetizing has standards does not cure this limitation. Thus neither Vellanki nor Cunningham singly or in combination describe what Applicant has claimed in claim 12.

Additionally, combining Vellanki which is concerned with "detecting a most advantageous protocol for communication by a client computer" (Abstract) and Cunningham which says packetizing may be standardized lacks a motivation to combine.

Thus neither Vellanki nor Cunningham singly or in combination describe what Applicant has claimed in claim 12. Applicant therefore requests allowance of claim 12 and claims dependent on claim 12.

#### Claim 17 Rejection under 35 U.S.C. § 102(a) Harvey

Applicant's claim 17 recites:

17. A firewall traversal system comprising:

a main system coupled to storage;

a communication subsystem coupled to the main system <u>and</u> a communication medium;

Response to OA of 08:10:2004

Page 10 of 14

2/15/2005 2:36 PM FROM: 4082579904 Heimlich Law TO: 1 703 8729306 PAGE: 017 OF 020 2/2/2005 7:35 IM FROM: 4082579904 Heimlich Law TO: 1 703 872 9306 TAGE: 014 OF 017

a packet examining subsystem coupled to the communication subsystem; and a database system coupled to the packet examining subsystem and the main system.

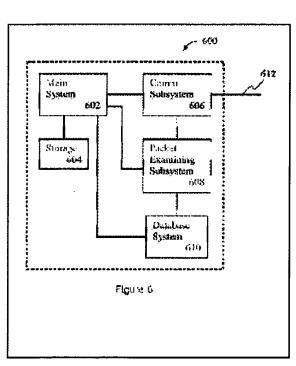
[Emphasis added.]

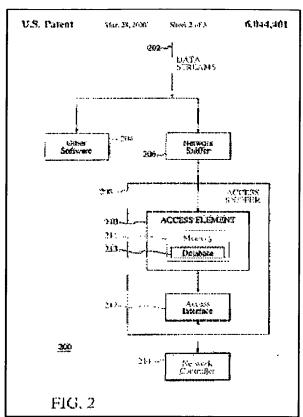
The Office states on page 5:

As per claim 17. Harvey teaches: a main system coupled to storage (Fig 2, element 208); a communication subsystem coupled to the main system and a communication medium (Fig 2, element 214, 202); a packet examining subsystem coupled to the communication subsystem (Fig 2, element 210); and a database system coupled to the packet examining subsystem and the main system (Fig 2, element 213).

Applicant's claim 17 is represented in graphical form in Figure 6 of Applicant's application. Harvey's Figure 2 is different for the following reason. See Figures below.

(Continued on next page.)





The Office states: "a communication subsystem coupled to the main system and a communication medium (Fig 2, evenent 214, 202)."

[Emphasis added.]

Harvey 214 is a network controller and is <u>not</u> connected to 208 <u>AND</u> 202.

Applicant's claim 17 has a communication subsystem (606) connected to a main system (602) AND to a communication medium (612). In contrast, Harvey's communication subsystem 214 is <u>only</u> coupled to a main system 208. The main system 208 then is connected to a network sniffer 206 which is then connected to the communication medium 202. Harvey and Applicant's are two different structures that are not capable of a morphological transformation to equate one with the other.

Response to OA of 08 10 2004

Page 12 of 14

2/15/2005 2:36 PM FROM: 4082579904 Heimlich Law TO: 1 703 8729306 PAGE: 019 OF 020 2/2/2005 7:35 IM FROM: 4082579904 Heimlich Law TO: 1 703 872 9306 TAUE: 016 OF 017

Since Harvey does not disclose this limitation of Applicant's claim 17, Harvey does not anticipate Applicant's claim 17. Applicant therefore requests allowance of claim 17 and all claims dependent on claim 17.

# CONCLUSION

Applicant submits that the rejection of dependent claims not specifically addressed, are addressed by Applicant's arguments to the claim(s) on which they depend.

Applicant respectfully submits that all claims are in condition for allowance and requests such.

Communication via cleartext email is authorized.

Respectfully submitted,

Heimlich Law

02/02/2005

Date

Digitally signed by Alan

DN; CN = Alan Heimlich, C = US, O = Heimlich Law

Alan Heimlich / Reg 48808

Attorney for Applicant(s)

Customer No. 40418

5952 Dial Way San Jose, CA 95129

Tel: 408 253-3860

Eml: alanheimlich@heimlichlaw.com